

73. (NEW) A light outputting device comprising:

a containment for housing an element for emitting light, the containment having a longitudinal axis and a transverse width defined about the longitudinal axis;

a light conducting element communicating with and extending co-axially with the containment, the light conducting element having an axial length substantially greater than a transverse width;

the light conducting element being aligned co-axially with the element for emitting light; the transverse width of the light conducting element being similar to the transverse width of the containment; and the light conducting element having a light input region whereby light generated by the element is enabled to pass axially into the light conducting element.

74. (NEW) The light outputting device according to claim 73, wherein the containment serves to locate the element for emitting light closer to the light input region of the light conducting element, or a plurality of light conducting elements, then to an end portion of the containment remote from the light input region or regions.

75. (NEW) The light outputting device according to claim 73, further comprising a reflector located relative to the element for emitting light and the light conducting element so as to reflect light from the element for emitting light axially into the light conducting element by way of the associated light input region.

76. (NEW) The light outputting device according to claim 73, wherein the containment is shaped so as to refract light from the element for emitting light axially into the light conducting element by way of the associated light input region.

77. (NEW) The light outputting device according to claim 73, wherein the containment serves to define a plenum about the element for emitting light whereby one of a vacuum, an inert gas and a mixture of gases is maintained about the element for emitting light.

78. (NEW) The light outputting device according to claim 73, further comprising means for varying the color of light output by the device.

79. (NEW) The light outputting device according to claim 73, wherein the element for emitting light comprises at least one of a resistive filament, an arc, a discharge device, a solid state emitter (PN junction), and a coherent light source with means for light stimulation and amplification.

80. (NEW) The light outputting device according to claim 73, wherein the light conducting element is one of fused quartz, glass and other like materials.

81. (NEW) The light outputting device according to claim 73, wherein the containment is one of fused quartz, glass and other like materials.

82. (NEW) A method of fabricating a light outputting device having a containment for housing an element for emitting light, the containment having a longitudinal axis and a transverse width defined about the longitudinal axis, a light conducting element communicating with and extending co-axially with the containment, the light conducting element having an axial length substantially greater than a transverse width, the light conducting element being aligned co-axially with the element for emitting light in the containment, the transverse width of the light conducting element being similar to the transverse width of the containment; and the light conducting element having a light input region whereby light generated by the element is enabled to pass axially into the light conducting element, the method comprising the steps of

providing the light conducting element in the form of a longitudinal member with opposing end faces separated by an outer surface extending between the end faces;

locating around the light conducting element a sleeve member of greater length than the light conducting element;

positioning one of the end faces of the light conducting element at or near one end of the sleeve so as to leave a length of sleeve projecting beyond the opposite end face of the light conducting element;

forming the light input region at the opposite end face of the light conducting element causing the sleeve member to be contiguously juxtaposed with the outer surface of the light conducting element;

locating the element for emitting light in the length of sleeve projecting beyond the opposite end face;

deforming the length of sleeve so as to form together with the light input region of the light conducting element the containment for the element for emitting light; and

sealing the deformed length of tube to cause the containment to form a gas tight enclosure for the element for emitting light.

83. (NEW) A method of fabricating a light outputting device according to claim 82, further comprising the step of forming the sleeve from a similar material to the light conducting member and causing the sleeve member to be contiguously juxtaposed with the outer surface of the light conducting element by a fusing operation.

84. (NEW) A light outputting device comprising:

a contiguous sleeve defining a communicating light source containment portion and a light wave conducting portion, the sleeve having an axial length and a substantially constant radial width defined about a longitudinal axis;

a plenum formed by the light source containment portion and the light wave conducting portion houses a light source and positions the light source adjacent a first end of the plenum defined by a light receiving surface of the light wave conducting portion, the light receiving surface of the light wave conducting portion receives light directly from the light source and passes the light along the axial length of the light wave conducting portion to a light output.

85. (NEW) The light outputting device according to claim 84, wherein the light source is located in a first end of the plenum immediately adjacent the light receiving end of the light wave conducting portion and spaced from a second remote end of the plenum.

86. (NEW) The light outputting device according to claim 84, further comprising a reflector substantially radially surrounding the light source for directing light waves emitted by the light source axially into the light receiving end of the light wave conducting portion.

87. (NEW) The light outputting device according to claim 84, wherein the light source containment portion is shaped so as to refract light from the element for emitting light axially into the light receiving end of the light wave conducting element.

88. (NEW) The light outputting device according to claim 84, wherein the plenum defined by the containment portion about the light source maintains an environment of one of a vacuum, an inert gas and a mixture of gases about the light emitting element.

89. (NEW) The light outputting device according to claim 84, further comprising means for varying the color of light output by the device.